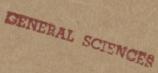
1952/53 Resources - Duelspring R26-153



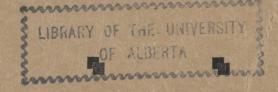
ANNUAL REPORTNE WEEK LOAN

OF THE



EASTERN ROCKIES FOREST CONSERVATION BOARD

FOR THE
FISCAL YEAR
1952 - 53



SD 414 C2E116 1952/53

CALGARY, ALBERTA 31st MARCH, 1953

Ex uibris universitates albertaeases



ANNUAL REPORT

of the

EASTERN ROCKIES FOREST CONSERVATION BOARD

for the

the fiscal period lat A FISCAL YEAR March 1953 pursuant to

tion Act of 1947 Tam 1952-53

UNIVERSITY OF ALBERTA

Calgary, Alberta

31st March 1953

ANMUAL REPORT

of the

EASTERN ROCKIES FOREST CONSERVATION BOARD

adt act

FISCAL YEAR

2-25661

Sist March 1953

Galgary, Alberta

LIBRARY UNIVERSITY OF ALBERTA

Calgary, Alberta, 26th June 1953.

To

The Honourable R. H. Winters, Minister of Resources and Development, Ottawa, Ontario.

Sir:

I have the honour to sumit herewith the Annual Report of the Eastern Rockies Forest Conservation Board for the fiscal period 1st April 1952 - 31st March 1953, pursuant to the provisions of the Eastern Rocky Mountain Forest Conservation Act of 1947. I am

Your obedient servant,

Howard Kennedy, Chairman.

Calgary, Alberta, 26th Jane 1953,

ST

The Honourable R. H. Winters, Minister of Resources and Development, Ottawa, Ontario.

412

I have the honour to sumit herewith the Annual Report of the Eastern Rockies Forest Conservation Board for the fiscal period 1st April 1952 * 31st March 1953, pursuant to the provisions of the Eastern Rocky Mountain Forest Conservation Act of 1947. 1 am

Your obedient servant,

Howard Kennedy, Chairman,

Calgary, Alberta, 26th June 1953.

To

The Honourable Ivan Casey, Minister of Lands and Forests, Edmonton, Alberta.

Sir:

I have the honour to submit herewith the Annual Report of the Eastern Rockies Forest Conservation Board for the fiscal period 1st April 1952 - 31st March 1953, pursuant to the provisions of the Eastern Rocky Mountain Forest Conservation Act of 1947. I am

Your obedient servant,

Howard Kennedy, Chairman.

Calgary, Alberta, 26th June 1953.

or

The Honourable Ivan Casey, Minister of Lands and Forests, Edmonton, Alberta.

Sixte

I have the honour to submit herewith the Annual Report of the Eastern Rockies Forest Conservation Board for the fiscal period lat April 1952 - 31st March 1953, pursuant to the provisions of the Eastern Rocky Mountain Forest Conservation Act of 1947. I am

Your obedient servant,

Howard Kennedy, Chairman

TABLE OF CONTENTS

	Page
PERSONNEL	niei Foreste
REPORT OF THE BOARD MEMBERS	2
REPORT OF THE CHIEF ENGINEER	.8
REPORT OF THE CHIEF FORESTER	13
REPORT OF THE SECRETARY	23
FINANCIAL STATEMENT	27

TABLE OF CONTENTS

Page	
	REPORT OF THE BOARD MEMBERS
	REPORT OF THE CHIEF ENGINEER
£\$	

PERSONNEL

Howard Kennedy, C. B. E., M. C., B. Sc. Chairman of the Board
George Tunstell, B. Sc. F.

Dominion Member of the Board
H. G. Jensen, LL. B.

Alberta Member of the Board
J. D. Middlemass, E. D., B. Sc.

Secretary
E. S. Fellows, M. Sc. F.

Chief Forester
C. R. Cornish, B. A. Sc., P. Eng.

Chief Engineer

PERSONNEL

Howard Kennedy, C. B. E., M. C., E. Sc., Chairman of the Board George Tunstell, E. Sc. F.

H. G., Jensen, LL. B.

Alberta Member of the Board J. D., Middlemass, E. D., B. Sc.

Secretary

E. S. Fellows, M. Sc. F.

Chief Forester

REPORT OF BOARD MEMBERS

Earlier reports of the Board have narrated its creation, its duties and responsibilities, as well as the method by which its funds are provided. This report will, therefore, be confined to its accomplishments during the fiscal period 1952-53 with added comment on significant developments for the same period.

FOREST Twelve fires were reported during the fire PROTECTION season. They burned over 8 1/2 acres (in a total of about 5 1/2 million) with out-of-pocket fire-fighting costs of only \$68.48. Most of these fires were caused by campers and smokers and occurred in the late spring and early fall when a serious fire hazard prevailed. Despite the high hazard in the autumn it did not prove necessary to close the Forests.

Personnel of the Forest Service assisted in extinguishing 18 fires outside the boundaries of the Forest Reserve.

Two new look-outs were constructed, and the accommodation replaced at one already existing. Roads to three new look -out sites were completed, and begun to three others. High-frequency, frequency-modulation radio has now been installed in all but two existing look-outs. The radio system for the Forest Reserve is practically completed, except where construction in look-outs or stations is not yet sufficiently advanced to permit its installation.

Federal forest entomologists report no serious insect threat to the Forests was apparent during the year.

GRAZING AND RANGE CON-DITIONS Field work of the survey of range conditions undertaken several years ago was completed. Management plans for all grazing allotments in the Forest Reserve south of the Bow River

are now prepared, effective in 1953.

REPORT OF BOARD MEMBERS

Earlier reports of the Board have narrated its creation, its duties and responsibilities, as well as the method by which its funds are provided. This report will, therefore, be confined to its accomplishments during the fiscal period 1952-53 with added comment on significant developments for the same period.

FOREST

Twelve fires were reported during the fire
PROTECTION

season. They burned over 8 1/2 acres (in a
total of about 5 1/2 million) with out-of-pocke

fire-fighting costs of only \$68.48. Most of these fires were caused by campers and smokers and occurred in the late spring and early fall when a serious fire hazard prevailed. Despite the high hazard in the autumn it did not prove necessary to close the Forests.

Personnel of the Forest Service assisted in extinguishing 18 fires outside the boundaries of the Forest Reserve.

Two new look-outs were constructed, and the accommodation replaced at one already existing. Roads to three new look -out sites were completed, and begun to three others. High-frequency, frequency-modulation radio has now been installed in all but two existing look-outs. The radio system for the Forest Reserve is practically completed, except where construction in look-outs or stations is not yet sufficiently advanced to permit its installation.

Federal forest entemologists report no serious insect threat to the Forests was apparent during the year.

GRAZING AND RANGE CON-DITIONS

Field work of the survey of range conditions undertaken several years ago was completed. Management plans for all grazing allotments in the Forest Reserve south of the Bow River

are now prepared, effective in 1953

A total of 22,391 domestic animals were permitted on the Forest Reserve in 1953. This represented 20,392 cattle, 1,800 sheep and 199 horses. The demand for grazing privileges south of the Bow River exceeds the carrying capacity of the ranges; but there is a possibility of developing greater capacity than now exists, north of the Bow River. Good co-operation from the Grazing Associations has been a feature of the past grazing season. It is gratifying to report general acceptance of the Board's management plans.

No deterioration of range conditions occurred and in some instances improvements resulting, in part, from increased precipitation, were reported.

Efforts to reduce the population of wild horses on the Reserve have so far not produced significant results.

LOGGING Logging operations increased within the Reserve area and conformed to over-all management plans based on sustained yield.

HYDROLOGY The past season was the first full season for operation of the chain of stream-gauging stations on the major streams draining the Forest Reserve. Erected at the expense of the Board, and operated by the Water Resources Division of the Department of Resources and Development, these stations will yield very valuable data - previously unavailable - concerning run-off from the slopes.

Weather stations were maintained at all Ranger Headquarters. An initial thirty-five precipitation gauges were installed in a total chain of one hundred. These gauges will yield extremely valuable comparative data, previously lacking, concerning precipitation at different elevations in the several valleys.

FOREST The inventory of forest resources on the INVENTORY Reserve was energetically pushed, with completion during 1953 being reasonably certain. Timber volumes, moreover, were generally found

-

A total of 32,391 domestic animals were permitted on the Forest Reserve in 1953. This represented 20,392 cattle, 1,800 sheep and 198 horses. The demand for grazing privileges south of the Row River exceeds the carrying capacity of the ranges; but there is a possibility of developing greater capacity than now exists, north of the Bow River. Good co-operation from the Grazing Associations has been a feature of the past grazing season. It is gratifying to report general acceptance of the Board's management plans.

No deterioration of range conditions occurred and in some instances improvements resulting, in part, from increased precipitation, were reported.

Efforts to reduce the population of wild horses on the Reserve have so far not produced significant results.

LOGGING Logging operations increased within the Reserve area and conformed to over-all management plans based on sustained vield.

HYDROLOGY

The past season was the first full season for operation of the chain of stream-gauging stations on the major streams draining the Forest Reserve.

Erected at the expense of the Board, and operated by the Water Resources Division of the Department of Resources and Development, these stations will yield very valuable data - previously unavailable - concerning run-off from the slopes.

Weather stations were maintained at all Ranger Headquarters. An initial thirty-five precipitation gauges were installed in a total chain of one hundred. These gauges will yield extremely valuable comparative data, previously lacking, concerning precipitation at different elevations in the several valleys.

FOREST
The inventory of forest resources on the INVENTORY
Reserve was energetically pushed, with completion during 1953 being reasonably certain. Timber volumes, moreover, were generally found

to be in excess of those anticipated. It should be emphasized that forest inventories not only establish timber volumes but also forest characteristics and possibilities from the standpoint of water conservation.

ROAD (1) Trunk Roads. CONSTRUCTION

On 22nd July Honourable R. H. Winters, Minister of Resources and Development, and Honourable N. E. Tanner, Minister of Lands and Forests for the Province of Alberta, officially opened that section of the trunk road constructed through the Forest Reserve area linking Coleman in the Crowsnest Pass with Seebe in the Bow River valley. The Board's portion of this highway amounts to 119.8 miles.

The trunk road connecting the Bow River valley with the Red Deer River valley - 42 miles - was completed during the year.

Work was commenced on the trunk road linking Clearwater Ranger Station with Nordegg on the North Saskatchewan, with 30 miles graded.

(2) Secondary Roads.

Work was continued on the secondary road linking the Jumping Pound, Elbow and Bighorn Ranger Stations. The section joining the Elbow and Bighorn areas was completed during the year; but a gap of three miles between Jumping Pound and the Elbow River remains to be finished. This 80-mile road is necessary because a high mountain range divides the area from the Kananaskis and Highwood valleys traversed by the trunk road.

A road following the James River valley was constructed for a distance of 17 miles, west of the Ranger Station.

(3) Access Roads.

Close co-operation was maintained between the Province and the Board in providing access roads to the Forest Reserve. In the Morley area the Province graded and improved

to be in excess of those anticipated. It should be emphasized that forest inventories not only establish timber volumes but also forest characteristics and possibilities from the standpoint of water conservation.

ROAD (1) Trunk Roads. CONSTRUCTION

On 22nd July Honourable R. H. Winters, Minister of Resources and Development, and Honourable N. E. Tanner, Minister of Lands and Forests for the Province of Alberta, officially opened that section of the trunk road constructed through the Forest Reserve area linking Coleman in the Crowsnest Pass with Seebe in the Bow River valley. The Board's portion of this highway amounts to 119.8 miles.

The trunk road connecting the Bow River valley with the Red Deer River valley - 42 miles - was completed during the year.

Work was commenced on the trunk road linking Clearwater Ranger Station with Nordegg on the North Saskatchewan, with 30 miles graded,

(2) Secondary Roads.

Work was continued on the secondary road linking the Jumping Pound, Elbow and Bighorn Ranger Stations. The section joining the Elbow and Bighorn areas was completed during the year; but a gap of three miles between Jumping Pound and the Elbow River remains to be finished. This 80-mile road is necessary because a high mountain range divides the area from the Kananaskis and Highwood valleys traversed by the trunk road.

A road following the James River valley was constructed for a distance of 17 miles, west of the Ranger Station.

(3) Access Roads.

Close co-operation was maintained between the Province and the Board in providing access roads to the Forest Reserve. In the Morley area the Province graded and improved

11 miles of road linking the Bow - Red Deer Trunk Road with the Calgary - Banff Highway. This section includes a substantial bridge over Waiparous Creek. The Board constructed 6 1/2 miles of road between Waiparous Creek and the east bounds of the Forest Reserve.

The Province and the Board shared equally the cost of 7 1/2 miles of road in the Willow Creek area linking the Board's transverse road system, which follows Willow and Johnson Creeks, to the Municipal road system west of Nanton.

(4) Service Roads and Truck Trails.

Substantial progress was made in constructing service roads to look-outs and truck trails, to provide access to main valleys for speedy delivery of personnel and equipment in case of fire.

BUILDINGS Substantial progress was made during the year in providing dwelling accommodation for rangers and assistant rangers. Look-outs, storehouses, garages, equipment sheds, and camp shelters were also constructed in conformity with the Board's schedule of expenditures on capital structures. The Provincial Department of Public Works agreed to purchase, at cost, the District Headquarters constructed by the Board at Blairmore in 1951.

SURFACE REVENUES Surface revenues for the year amounted to \$467,939.53, substantially in excess of maintenance costs of \$299,568.22.

LEGISLATION Agreement was reached between the Federal Government and the Government of Alberta which -

- (1) extended the period for expenditure of capital sums provided by the Federal Government for one year to 31st March 1955,
 - (2) raised the ceiling for maintenance expenditures on the Forest Reserve to \$450,000.00 per annum,

Il miles of road linking the Bow - Red Deer Trunk Road with the Calgary - Banff Highway. This section includes a substantial bridge over Waiparous Creek. The Board constructed 6 1/2 miles of road between Waiparous Creek and the east bounds of the Forest Reserve.

The Province and the Board shared equally the cost of 7 1/2 miles of road in the Willow Creek area linking the Board's transverse road system, which follows Willew and Johnson Creeks, to the Municipal road system west of Nanton.

(4) Service Roads and Truck Trails.

Substantial progress was made in constructing service roads to look-outs and truck trails, to provide access to main valleys for speedy delivery of personnel and equipment in case of fire.

BUILDINGS Substantial progress was made during the year in providing dwelling accommodation for rangers and assistant rangers. Look-outs, storehouses, garages, equipment sheds, and camp shelters were also constructed in conformity with the Board's schedule of expenditures on capital structures. The Provincial Department of Public Works agreed to purchase, at cost, the District Headquarters constructed by the Board at Blairmore in 1951.

SURFACE REVENUES

Surface revenues for the year amounted to \$467,939.53, substantially in excess of maintenance costs of \$299,568.22.

LEGISLATION

Agreement was reached between the Federal Government and the Government of Alberta

which -

- (1) extended the period for expenditure of capital sums provided by the Federal Government for one year to 31st March 1955.
- (2) raised the ceiling for maintenance expenditures on the Forest Reserve to \$450,000.00 per annum,

- (3) provided that the Government of Alberta would assume all charges for maintenance expenditures on the Forest Reserve during the remainder of the life of the Agreement. Fire-fighting charges in excess of \$10,000.00 in any one year will, however, continue to be shared between the two Governments.
- (4) provided that at the termination of the period of capital expenditure at 31st March 1955, the Province of Alberta will be entitled to two members on the Board, one of whom may be Chairman. The Federal Government will then be represented by one member.

Appropriate legislation was passed by both Governments to implement the above amendments to the original Agreement.

PERSONNEL The Board has 21 full-time employees.

The Forest Service of the Province employs a staff in connection with the Forest Reserve of 59 full-time employees. A fluctuating force is employed seasonally, at prevailing wage rates.

BOARD No change occurred in Board membership MEMBERSHIP during the year.

CAPITAL Some revision of the Board's programme was EXPENDITURE necessary owing to increased costs since work PROGRAMME was commenced. It has none the less proven possible to provide for the most vital requirements. With normal weather conditions it will be possible to

complete the revised schedule before 31st March 1955.

OTHER Reports giving more detail of the Board's work and prepared by the Chief Engineer, Chief Forester and the Secretary, follow.

ACKNOWLEDGE- The Board again gratefully acknowledges

MENTS the whole-hearted co-operation extended
to it by both Governments involved, and
expresses its appreciation of the spirit in which its staff, and

(3) provided that the Covernment of Alberta would assume all charges for maintenance expenditures on the Forest Reserve during the remainder of the life of the Agreement. Fire-highing charges in excess of \$10,000,00 in any one year will, however, cominue to be shared between the two Covernments.

(d) provided that at the termination of the period of capital expenditure at 31st Masch 1955, the Province of Alberta will be entitled to two inquivers on the Board, one of whom may be Chairman. The Federal Covernment will then be represented by one member.

Appropriate legislation was passed by both Governments to implement the above amendments to the original Agreement:

PERSONNEL The Board has 21 full-time employees

The Forest Service of the Province employs a staff in connection with the Forest Reserve of 59 full-time employees. A fluctuating force is employed seasonally, at prevailing wage rates.

BOARD No change occurred in Board meropership MEMBERSHIP during the year.

CAPITAL

Some revision of the Board's programme was EXPENDITURE necessary owing to increased costs since work PROGRAMME was commenced. It has none the less proven possible to provide for the most vital require-

ments. With normal weather conditions it will be possible to complete the revised schedule before 31st March 1955.

Reports giving more detail of the Beard's work and propared by the Chief Engineer Chief Forester and the Secretary, follow.

ACKNOWLEDGE- The Board again gratefully acknowledges
MENTS the whole-hearted co-operation extended
to it by both Governments involved, and
expresses its appreciation of the spirit in which its staff, and

the staff of the Forest Service have faithfully and cheerfully carried out their tasks. The members of the Board feel that the ultimate success of its programme is closely linked to this spirit of team-work between its staff and that of the Forest Service.

Howard Kennedy, Chairman,
George Tunstell, Dominion Member,
H. G. Jensen, Alberta Member.

the staff of the Forest Service have faithfully and cheerfully carried out their tasks. The members of the Board feel that the ultimate success of its programme is closely linked to this spirit of team-work between its staff and that of the Forest Service.

Howard Kennedy, Chairman, George Tenstell, Dominion Member, H. G. Jewsen, Alberta Member,

REPORT OF THE CHIEF ENGINEER

Due in large measure to the prevailing good weather, the 1952 season was highly successful from the construction point of view.

In addition to completion of the road work planned for the year, the large carry-over of work left after the abnormally wet season of 1951 was finished. Building construction which had not been so seriously affected by the weather of last year, also progressed satisfactorily. As a consequence the 1953-54 season was entered with the whole construction programme on schedule. Completion of the programme within the capital period will still depend to a great extent on the weather experienced in the next two years.

The main object of construction activity continued to be the completion of a network of roads to serve all parts of the Forest Reserve. During the year under review construction was completed of 48 miles of trunk road, 52 miles of secondary road, 30 miles of service road to lookouts and 30 miles of truck trails.

TRUNK ROAD By request of Provincial authorities all CONSTRUCTION contract work on the trunk road was handled directly by the engineering division of the Board, as in previous years.

Crushed gravel was applied to 15 miles of the trunk road south of the Bow River, completing that section of the main road. Also by contract 30,000 tons of gravel was crushed and stockpiled at strategic points along the road to ensure a future supply of surfacing material.

The 13 miles of grading left unfinished from last year's programme for the North Bow Trunk Road was completed. An additional 6 1/2 miles of grade was constructed outside the Reserve as the Board's contribution to a permanent access from the Trans-Canada Highway to that area. The whole section of 42 miles was surfaced with crushed gravel,

REPORT OF THE CHIEF ENGINEER

Due in large measure to the prevailing good weather, the 1952 season was highly successful from the construction point of view.

In addition to completion of the road work planned for the year, the large carry-over of work left after the abmormally wet season of 1951 was finished. Building construction which had not been so seriously affected by the weather of last year, also progressed satisfactorily. As a consequence the 1953-54 season was entered with the whole construction programme on schedule. Completion of the programme within the capital period will still depend to a great extent on the weather experienced in the next two years.

The main object of construction activity continued to be the completion of a network of roads to serve all parts of the Forest Reserve. During the year under review construction was completed of 48 miles of trunk road, 52 miles of secondary road, 30 miles of service road to lookouts and 30 miles of truck trails.

TRUNK ROAD By request of Provincial authorities all CONSTRUCTION contract work on the trunk road was bandled directly by the engineering division of the

Board, as in previous years

Crushed gravel was applied to 15 miles of the trunk road south of the Bow River, completing that section of the main road. Also by contract 30,000 tons of gravel was crushed and stockpiled at strategic points along the road to ensure a luture supply of surfacing material.

The 13 miles of grading left unfinished from last year's programme for the North How Trunk Road was completed. An additional 6 1/2 miles of grade was constructed outside the Reserve as the Board's contribution to a permanent access from the Trans-Canada Highway to that area. The whole section of 42 miles was surfaced with crushed gravel,

and 10,000 tons of crushed material was stockpiled for future use. It is expected that this portion of the trunk road between the Bow and Red Deer Rivers will be opened to traffic in the summer of 1953.

A contract was awarded at the start of the fiscal year to the New West Construction Co. Ltd. of Edmonton for construction of the North Clearwater Trunk Road between the Clearwater River and Nordegg, a distance of some 75 miles. During the year 30 miles of grading was done on this contract and the entire right-of-way was cleared. As a preliminary to the clearing work a location survey was made from the Ram River to Nordegg, a distance of 38 miles.

Preliminary investigations were made of possible routes for the Clearwater Trunk Road between the Red Deer and Clearwater Rivers, which will be the final link in the Coleman to Nordegg road. Some construction will be carried out during the 1953 season in order to assure completion by end of 1954.

ACCESS In order to provide access to the Reserve from ROADS the Provincial road system, two separate agreements were made with the Department of Highways and implemented during the year.

By the first arrangement the Board constructed 6 1/2 miles of road in the Morley area and the Department improved 11 miles of existing road and undertook to erect a fairly major bridge structure across Waiparous Creek. The bridge construction was actively under way at the end of the fiscal year. Completion will give good access from the Trans-Canada Highway to the recently completed North Bow Trunk Road.

By the second arrangement the Board provided approximately 50 per cent of the cost of improving 7 1/2 miles of road in the Willow Creek area west of Nanton. The reconstruction was done by Provincial crews during the season and provides a connection from the Crow Trunk Road to Nanton by way of Johnson Creek Road.

and 10,000 tons of crushed material was stockpiled for future use. It is expected that this portion of the trunk road between the Bow and Red Deer Rivers will be opened to traffic in the summer of 1953.

A contract was awarded at the start of the fiscal year to the New West Construction Co. Ltd. of Edmonton for construction of the North Clearwater Trunk Road between the Clearwater River and Nordegg, a distance of some 75 miles. Buring the year 30 miles of grading was done on this contract and the entire right-of-way was cleared. As a preliminary to the clearing work a location survey was made from the Ram River to Nordegg, a distance of 38 miles.

Preliminary investigations were made of possible routes for the Clearwater Trunk Road between the Red Deer and Clearwater Rivers, which will be the final link in the Coleman to Nordegg road. Some construction will be carried out during the 1953 season in order to assure completion by end of 1954.

ACCESS In order to provide access to the Reserve from ROADS the Provincial road system, two separate agreements were made with the Department of Highways and implemented during the year.

By the first arrangement the Board constructed 6 1/2 miles of road in the Morley area and the Department improved 11 miles of existing road and undertook to erect a fairly major bridge structure across Waiparous Creek. The bridge construction was actively under way at the end of the fiscal year. Completion will give good access from the Trans-Canada Highway to the recently completed North Bow Trunk Road.

By the second arrangement the Board provided approximately 50 per cent of the cost of improving 7 1/2 miles of road in the Willow Creek area west of Nanton. The reconstruction was done by Provincial crews during the season and provides a connection from the Crow Trunk Road to Nanton by way of Johnson Creek Road.

DAY LABOUR Substantial progress was made on the pro-ROAD WORK gramme of constructing secondary and lower-standard roads. This work was

carried out under supervision of Alberta Forest Service officers with engineering advice supplied by the Board staff. The heavy equipment owned by the Board was used in the construction work and supplemented by rented equipment as required.

Emphasis was placed on the building of secondary roads and service roads to look-outs, although the programme of building truck trails for emergency use was continued.

In the Crowsnest Forest service roads were built to the Sugarloaf Look-out site in the Livingstone District and to the existing Ironstone Look-out.

In the Bow River Forest good progress was made towards completion of the Bow River secondary road which will serve an important area cut off from the trunk road by a mountain range. This secondary road of which only three miles is incomplete, will connect the Bighorn, Elbow and Jumping Pound Ranger Stations and will join the trunk road in the Kananaskis District.

Also in the Bow River Forest a service road was completed to the new Kananaskis Look-out, and roads were substantially completed to the site of Raspberry Ridge Lookout and to the existing Junction Mountain Look-out. A modified secondary road was built to connect the Bighorn Ranger Station with the North Fork cabin.

In the Clearwater Forest a secondary road was built up the James River from James cabin to the proposed site of the Clearwater Trunk Road. Service roads were built to the existing Baseline and Bluehill Look-outs. A truck trail was also built to connect the new Baseline Look-out Road and the existing Prairie Creek Road to the North Clearwater Trunk Road. In the Clearwater District a short truck trail was built up Cutoff Creek.

DAY LABSONE ROAD WORSE

Substantial progress was made on the programmer of constructing secondary and lower - standard roads. This work was

carried out under supervision of Alberta Forest Service officers with engineeringadvice supplied by the Board staff. The heavy equipment owned by the Board was used in the construction work and supplemented by rented equipment as required:

Emphasis was placed on the building of secondary roads and service roads to look-outs, although the programme of building truck trails for emergency use was continued.

In the Crowsnest Forest service roads were built to the Sugarloaf. Look-out site in the Livingstone District and to the existing Ironstone Look-out.

In the Bow River Forest good progress was made towards completion of the Bow River secondary road which will serve an important area cut off from the trunk road by a mountain range. This secondary road of which only three miles is incomplete, will connect the Bighorn, Elbow and Jumping Pound Ranger Stations and will join the trunk road in the Kananaskis District.

Also in the Bow River Forest a Service road was completed to the new Kananaskis Look-out, and roads were substantially completed to the site of Raspberry Ridge Look-out and to the existing Junction Mountain Look-out. A modified secondary road was built to connect the Bighorn Ranger Station with the North Fork cabin.

In the Clearwater Forest a secondary road was built up the James River from James cabin to the proposed site of the Clearwater Trunk Road. Service roads were built to the existing Baseline and Bluehill Look-outs. A truck trail was also built to connect the new Baseline Look-out Road and the existing Prairie Creek Road to the North Clearwater Trunk Road. In the Clearwater District a short truck trail was built up Cutoff Creek.

BUILDING Substantial progress was made in carrying CONSTRUCTION out the programme of building construction throughout the Reserve. The work was done under supervision of the Alberta Forest Service and a large part of the labour was supplied by the ranger staff.

In the Crowsnest Forest a ranger's house at the Willow Creek Station was virtually completed and a double garage and engine house were built for that district. At the Gap Ranger Station the ranger's house was completed and a double garage partially finished.

In the Bow River Forest ranger houses were nearly completed at the Sentinel and Bighorn Stations. Two cottages for assistant rangers were built at the Sentinel and Elbow Stations and a double garage at the Bighorn Ranger Station.

In the Clearwater Forest ranger houses were completed at the Clearwater and Red Deer Stations and cottages were built for the Clearwater and West Brazeau Districts.

ROAD USE The opening of the Bow-Crow Trunk Road last summer made accessible a new and scenic area within easy reach of Calgary and a number of smaller centres in the south of the Province. Pleasure traffic over the road was fairly heavy, probably approaching 200 vehicles per day on week-ends.

With the development of the area commercial activities are increasing and the various roads are being used to an increasing extent by commercial traffic engaged in logging and other activities. A set of regulations has been issued providing control of such traffic and imposing a road-use toll on commercial users.

The mileage of road in the Board's area is now considerable and is increasing each year. The volume of traffic combined with the harsh erosive action of the elements

BURLDHAG Substantial progress was under in carrying CONSTRUCTION out the programme of luniding construction timenagious the Reserva. The work was done under supervision of the Alberta Forest Service and a large part of the labour was supplied by the ranger staff.

in the Crowsnest Forest a ranger's house at the Willow Creek Station was virtually completed and a double garage and engine house were built for that district. At the Cap Ranger Station the ranger's house was completed and a double garage partially finished.

In the Bow River Forest ranger houses were nearly completed at the Sentinel and Bighorn Stations. Two cottages for assistant rangers were built at the Sentinel and Elbow Stations and a double garage at the Bighorn Ranger Station.

In the Clearwater Forest ranger bouses were completed at the Clearwater and Red Deer Stations and cottages were built for the Clearwater and West Brazeau Districts.

ROAD USE The opening of the Bow-Crow Trunk Road last summer made accessible a new and scenic area within easy reach of Calgary and a number of smaller centres in the south of the Province. Pleasure traffic over the road was fairly heavy, probably approaching 200 vehicles per day on week-ends.

With the development of the area commercial activities are increasing and the various roads are being used to an increasing extent by commercial iradiic engaged in logging and other activities. A set of regulations has been issued providing control of such traffic and imposing a road-use toll on commercial users.

The mileage of road in the Board's area is now considerable and is increasing each year. The volume of traffic combined with the harsh erosive action of the elements

in the rugged terrain on the Reserve makes it very necessary that organized road maintenance be carried out. An additional power road maintainer was acquired by the Board in the spring of 1952, giving a total of three power-graders available for road maintenance.

C. R. Cornish, Chief Engineer. in the rugged terrain on the Reserve makes it very necessary that organized road maintenance be carried out. An additional power read maintainer was acquired by the Board in the spring of 1952, giving a total of three power-graders available for road maintenance.

Con R. Cornish, Chief Engineer,

REPORT OF THE CHIEF FORESTER

FOREST PROTECTION

FOREST FIRE The succession of unusually favourable PROTECTION forest fire seasons continued through 1952.

Although the number of fires rose to 12 last season, the fire loss was less than in 1951. The total area burned over was 8 1/2 acres, mostly timbered and mostly young growth. The loss of merchantable timber was

It is regrettable, however, that it must be reported that the great majority of fires were caused by campers and smokers; but, in view of the large number of visitors to the area, the incidence of fires was gratifyingly low. The out-of-pocket expense for fire fighting incurred by the Board was a mere \$68.48.

negligible.

In addition to fires within the conservation area, personnel of the Forest Reserve assisted in extinguishing 18 fires near, but outside, the boundary. No out-of-pocket expense to the Board was involved in these cases and the amount of time spent on these fires by East Slope personnel was relatively trivial.

Most of the fires occurred in the late spring, early summer and late fall. A fairly serious fire hazard developed in the autumn which was comparatively warm and very dry; however, through the good co-operation of the public, the period passed without any serious fires and without the need of applying a forest closure.

DEVELOP- New look-outs were constructed in the MENTS IN Kananaskis and Aura Districts in the Bow FIRE CONTROL River Forest, and the Moose Mountain Look-out in the Elbow District was replaced by a new building. Roads were constructed to the Ironstone Look-out in the Crowsnest area and the Bluehill and Baseline Look-outs in the Clearwater Forest, and in three other cases

REPORT OF THE CHURE FLORESTER

PEREST PROTECTION

FOREST FIRE
The succession of unusually favourable
PROTECTION sprest fire seasons continued through 1952.

isst scason, the fire four was less than in 1951. The total area burned over was \$ 1/2 acres, mostly timbered and mostly young growth. The loss of merchantable timber was negligible.

It is regrettable, however, that it must be reported that the great majority of lives were caused by enumpers and smokers; but, in view of the large number of visitors to the area, the incidence of fires was gratifyingly low. The out-of-pocket expense for fire fighting incurred by the Board was a mere \$68.48.

In addition to fires within the conservation area, personnel of the Forest Reserve assisted in extinguishing 13 fires near, but outside, the boundary. No out-of-pocket expense to the Board was involved in these cases and the amount of time spent on these fires by East Slope personnel was relatively trivial.

Most of the fires occurred in the late spring, early summer and late fall. A fairly serious fire bazard developed in the autumn which was comparatively warm and very dry; however, through the good co-operation of the public, the period passed without any serious fires and without the need of applying a forest closure.

DEVELOP- New look-outs were constructed in the MENTS IN Kananaskis and Aura Districts in the Bow FIRE CONTROL River Forest, and the Moose Mountain Look-

new building. Roads were constructed to the Pronstone Lookout in the Crowsnest area and the Bluehill and Baseline Lookouts in the Clearwater Forest, and in three other cases (Sugarloaf, Junction Mountain and Raspberry Ridge Lookout sites) substantial progress was made in the construction of roads. When access has been thus improved, new lookouts will be built or old ones will be rebuilt to improved standards as needed.

By the year's end, high-frequency, frequency-modulation radio communication was installed in nine out of the eleven look-outs now built. The same radio system links up practically all district ranger stations and head-quarters establishments. For the communication system the 153 megacycle band was found to be the most satisfactory. In addition to these fixed radio stations 25 portable sets and five mobile sets have been purchased for use in remote areas and in emergencies.

The road construction programme described in the report of the Chief Engineer continues to be a major element in fire-control planning.

No significant additions to fire-fighting equipment were made during the year because available supplies are considered to be in balance with other phases of protection. However, as more roads are built, additional mobile equipment can be used to advantage and this aspect will not be neglected.

PROTECTION AGAINST INSECTS AND DISEASE Again this year we have enjoyed the cooperation of the Forest Insect Survey of the Federal Department of Agriculture whose field men have inspected the conservation area for possible insect attacks

of a serious nature. It is good to be able to report that the Forest Reserve has been given what amounts to a clean bill of health. Even the small areas in which the lodgepole-pine needle miner previously threatened to become a significant problem are now reported to be virtually free of the insect. We are warned that we may experience an abnormal outbreak of the tent caterpillar in the northern part of the Forest Reserve next season, but this will result in more

(Sugarloaf, Janetian Mountain and Raspberry Ridge Lookout sites) substantial progress was made in the construction of roads. When access has been thus improved, new lookouts will be built or old ones will be rebuilt to improved standards as needed:

By the year's end, high draquency, drequencymodulation radio communication was installed in nine out
of the eleven look-outs now built. The same radio system
links up practically all district ranger stations and headquarters establishments. For the communication system
the 153 megacycle band was found to be the most satisfactory. In addition to these fixed radio stations 25 portable
sets and five mobile sets have been purchased for use in
remote areas and in emergencies.

The road construction programme described in the report of the Chief Engineer continues to be a major element in fire-control planning.

No significant additions to fire-fighting equipment were made during the year because available supplies are considered to be in balance with other phases of protection. However, as more roads are built, additional mobile equipment can be used to advantage and this aspect will not be neglected.

PROTECTION
AGAINST
INSECTS AND
DISEASE

Again this year we have enjoyed the cooperation of the Forest Insect Survey of the Federal Department of Agriculture whose field men have inspected the con-

of a serious nature. It is good to be able to report that the Forest Reserve has been given what amounts to a clean bill of health. Even the small areas in which the lodgepole-pine needle miner previously threatened to become a significant problem are now reported to be virtually free of the insect. We are warned that we may experience as abnormal outbreak of the test caterpillar in the northern part of the Forest Reserve next season, but this will result in more

unsightliness than actual damage. The threat is not one to justify any particular concern at present.

In the matter of disease, officers of the newly established Federal Forest Pathology Laboratory in Calgary have made a number of preliminary surveys in the Forest Reserve.

A substantial amount of sporadic disease is almost always present in all forests. So long as this can be attributed to the lack of vigour of individual trees or to local conditions of site or growth, the matter need not be considered as very serious. However, certain diseases spread quite rapidly and attack healthy stands of timber. Such epidemics are cause for concern. Within the Forest Reserve a number of points of infection of dwarf mistletoe on lodgepole pine have been reported. At present these are not alarming, but it will be necessary to keep a close watch for the spread of this disease.

unsightliness than actual damage. The threat is not one to justify any particular contorn at present.

In the matter of disease, officers of the newly: ... established Federal Forest Fathology Laboratory in Calgary ... have made a number of preliminary surveys in the Forest Reserve.

A substantial amount of sporadic disease is almost always present in all forests. So long as this can be attributed to the lack of vigour of individual trees or to local conditions of site or growth, the matter need not be considered as very serious. However, certain diseases spread quite rapidly and attack healthy stands of timber. Such epidemics are cause for concern. Within the Forest Reserve a number of points of infection of dwarf mistletoe on lodgepole pine have been reported. At present these are not alarming, but it will be necessary to keep a close watch for the spread of this disease.

RANGE MANAGEMENT

GRAZING A total of 22, 391 domestic animals were grazed under permit on the Forest Reserve during 1952. This represented a decrease of about four per cent from the figure of the previous year, which may be accounted for chiefly by the fact that the condition of the range in some localities necessitated reductions in the carrying capacity. However, there were also some voluntary decreases in the number of stock grazed by permit holders. There was a very slight increase in the number of permits issued, the total being 283 as compared with 278 last year. Of animals grazed the vast majority were cattle - 20, 392 - while the balance was made up of 1,800 sheep and 199 horses.

The demand for grazing privileges continues to exceed the calculated carrying capacity of the range now in use. North of the Bow River, however, there are still areas which could be developed into satisfactory range for domestic animals.

Efforts to reduce the population of wild and stray horses in the Forest Reserve have so far been only partially successful, but will be continued. On the other hand, measures to prevent the straying of more animals have been quite effective, and it may be considered that progress is being made in the solution of this problem.

RANGE The survey of range conditions started several years ago was continued in 1952 and the major phase of this project is now completed. Much of the survey work during the past season was in the Clearwater Forest where there is now little grazing of domestic stock. The survey was therefore much less intensive than elsehwere, and was designed merely to assess the grazing potential for both wild animals and stock.

By the end of the year, management plans for all grazing allotments in the Forest Reserve south of the Bow River were virtually completed. During the 1953 season, all these allotments will be grazed under pre-arranged plans.

THEMOTOMENTS CHARLE

PARMIT AND OF TR. 36F domestic annuals were graved under persons to the Forest Reserve daring 1952. This

spissential a decrease of about tour per centifrom the figure of a provider very, major may be recorated for chiefly by the fact in the condition of the range in some localines necessitated aductions in the carrying capacity. However, there were also rate voluntary decreases in the carrying capacity. However, there were also of holiders. There was a new sight increase in the camber of crimits issued, the total being 283 as compared with 278 tast. Sign of animals grazed the vest majority were cattle - 36, 392 animals grazed the vest majority were cattle - 36, 392 animals grazed the vest majority were cattle - 36, 392 animals grazed up of 1, 800 sieep and 199 horses.

The demand for grazing privileges continues to seeed the calculated carrying capacity of the range now in use, of the flow flower, however, there are still areas which ould be developed into satisfactory range for domestic animals.

Efforts to reduce the population of wild and stray brack in the Forest Reserve have so far been only partially sectionally but will be continued. On the other hand, measures prevent the straying of more animals have been quite effective, the it may be considered that progress is being made in the solution of this problem.

ANGE YOUR TION years ago was continued in 1952 and the major phase of this project is now completed. Much the survey work during the past season was in the Clearwater orest where there is now little graning of domestic stock. The irvey was therefore much less intensive than elsebwere, and as designed merely to assets the graning potential for book wild the continue of the potential for book wild

By the end of the year, management plans for all carity allobrents in the Forest Accerve south of the Bow River ere virtually completed. During the 1953 season, all these dotments will be grased under pre-arranged plans.

Inspections were made of some of the grazing allotments which have been under planned use for one or two seasons. It is a pleasure to report that in no case was any deterioration of range condition noted and in several instances there was marked improvement, but it should be remarked that the season was an unusually favourable one. More important still, however, is the increased interest taken by the stockmen in the condition of the range. There is growing realization among them that their long-term interests and the interests of range and watershed conservation are inextricably tied together. This fosters more cordial co-operation between the permit holders and the forest authority to an extent where the users themselves are beginning to suggest improved management practices on the Crown lands they occupy.

Two more fenced exclosures have been set up as standards of comparisons of range conditions and readings were taken on 34 permanent range transects. This is part of the programme of a continuing check of range conditions which it is hoped will be carried forward indefinitely in future.

No survey of elk winter range was made in the spring of 1952. The winter was relatively mild, however, and for this reason it is not anticipated that the elk winter range has suffered this year. Nevertheless, in certain areas there is normally evidence of strong competition for forage between elk and domestic livestock which is a situation giving rise to some concern.

The forest rangers of the Reserve have been given special instruction in the matter of range management, the interpretation of grazing management plans, the supervision of livestock handling, and the inspection of range condition. The results of this special training are apparent both in the reports submitted and in the relationship between the rangers and the stockmen.

Inspections were made of some of the grazing allotments which have been under planned ase for one or two seasons. It is a pleasure to report that in no case was any deterioration of range condition noted and in several instances there was marked improvement, but it should be remarked that the season was an unusually favourable one. More important still, however, is the increased interest taken by the stockmen in the condition of the range. There is growing realization among them that their long-term interests and the interests of range and watershed conservation are inextricably tied together. This losters more cordial co-operation between the permit holders and the forest authority to an extent where the users themselves are beginning to suggest improved management practices on the Crown lands they occupy

Two more tenced exclosures have been set up as standards of comparisons of range conditions and readings were taken on 34 permanent range transects. This is part of the programme of a continuing check of range conditions which it is hoped will be carried forward indefinitely in future.

No survey of elk winter range was made in the spring of 1952. The winter was relatively mild, however, and for this reason it is not anticipated that the elk winter range has suffered this year. Nevertheless, in certain areas there is normally evidence of strong competition for forage between elk and domestic livestock which is a situation giving rise to some concern.

The forest rangers of the Reserve have been given special instruction in the matter of range management, the interpretation of grazing management plans, the supervision of livestock handling, and the inspection of range condition. The results of this special training are apparent both in the reports submitted and in the relationship between the rangers and the stockmen.

FOREST OPERATIONS

LOGGING The demand for timber, particularly sawlogs, continues to be heavy. During the year 15 applications for License Timber Berths were received by the Board. Of these, 12 were approved, in some cases with amendments, and three were disallowed in the interests of good forest and watershed management. In addition, three applications for the right to salvage fire-killed timber were approved under the Board's general policy that such salvage should be encouraged under normal circumstances.

At the end of the year, 65 License Timber Berths were active in the Forest Reserve as compared with 56 at the close of the fiscal year 1950-51. A relatively small amount of timber was disposed of by permit. A significant change in policy was inauguated during the year under which specific areas were set aside for the cutting of either green or fire-killed timber under permit. While cutting under permit may still be allowed outside these specified blocks of timber, the policy has tended to concentrate small operations.

There was a significant increase in the production of timber during the year. In the case of green sawn lumber, the output was close to 43 million feet board measure - an increase of slightly more than 25 per cent over the previous year. Lumber produced from fire-killed timber declined from about two million feet board measure in 1951-52 to just under 1,400,000 feet this year.

The coal mines of the area used over 5,700,000 linear feet of round timber in their operations which represented an increase of 50 per cent over their 1951-52 requirements. About 85 per cent of this material was salvaged from fire-killed timber.

Relatively small quantities of timber were cut for fuel, fencing material, piling, and pulpwood.

The total output of timber from the Forest Reserve

FOREST OPERATIONS

LOGGIMG The demand for timber, particularly sawlogs, continues to be heavy. During the year 15 applies tions for License Timber Berths were received by the Board. Of these, 12 were approved in some cases with amendments, and three were disallowed in the interests of good forest and watershed management. In addition, three applications for the right to salvage fire-killed timber were approved under the Board's general policy that such salvage should be encouraged under normal circumstances.

At the end of the year, 65 License Timber Berths were active in the Forest Reserve as compared with 56 at the close of the fiscal year 1950-51. A relatively small amount of timber was disposed of by permit. A significant change in policy was inaugusted during the year under which specific areas were set acide for the cutting of either green or fire-killed timber under permit. While cutting under permit may still be allowed outside these specified blocks of timber, the policy has lended to concentrate small operations.

There was a significant increase in the production of timber during the year. In the case of green sawn lumber, the output was close to 43 million fact board measure - an increase of slightly more than 25 per cent over the previous year. Lumber produced from five-killed timber declined from about two million feet board measure in 1951-52 to just under 1:400,000 feet this year.

The coal mines of the area used over 5,700,000 inear, feet of round timber in their operations which represented an increase of 50 per cent over their 1951-52 requirements. About 85 per cent of this material was salvaged from ire-killed timber.

Relatively small quantilies of timber were cut for uel, fencing material, piling, and pulpwood.

The total output of timber from the Forest Reserve

during 1952-53 is estimated to be in the vicinity of 10.7 million cubic feet, of which approximately 1.8 million cubic feet, or 17 per cent, was fire-killed. This is equivalent to a rate of cutting of about two cubic feet per acre of the whole Forest Reserve, and is almost double the rate of production in the year 1948-49 which was the first year of the Board's operation. The rate of cutting is still well within the over-all rate of increment.

Change in the policy of timber disposal approved during the year was one permitting sales of less than five million feet board measure to be approved or disallowed at staff level under the terms of basic policies, unless special circumstances are involved.

During recent months, two areas within the Forest Reserve have been examined with a view to determining the feasibility of placing them under permanent management plans; but, by the close of the year, no final decisions had been reached as to the disposal of these blocks of timber.

OTHER COMMERCIAL ACTIVITIES Interest in geological and seismic studies and exploration for oil inside the Forest Reserve continues at a high level. This has brought a number of administrative problems,

but the results of these explorations have not yet been such as to raise serious problems of policy. Interest in the development of new coal mines also continues to be strong, not so much because of need for increased supplies of coal as for cheaper sources. Exploration for base metals is on the increase, though it is not as yet of major importance.

All these activities involve only an insignificant proportion of the area of the Forest Reserve. However, because of the nature of the operations, they may have an important effect on watershed management and call for close supervision in the interests of water conservation.

FOREST INVENTORY

Work on an inventory of the forest resources of the conservation area was continued during the season of 1952, chiefly north of the Bow Surfing 1932-33 is estimated to be in the vicinity of 10.7 million cubic million cubic seet, or 17 per cest, was fire-killed. This is equivalent to a rate of cutting of about two cubic feet per acre of the whole Ferest Reserve, and is almost double the rate of production in the year 1948-49 which was the first year of the Board's operation. The rate of cutting is still well within the over-all rate of increment.

Change in the policy of timber disposal approved during the year was one permitting sales of less than five million feet board measure to be approved or disallowed at staff level under the terms of basic policies, unless special freumstances are involved.

During recent months, two areas within the Forest deserve have been examined with a view to determining the sasibility of placing them under permanent management plans; sat, by the close of the year, no final decisions had been eached as to the disposal of these blocks of timber.

OTHER COMMERCIAL CTIVITIES

Interest in geological and seismic studies and exploration for oil faside the Forest Reserve continues at a high level. This has brought a sumber of samisisters.

ut the results of these explorations have not yet been such as a raise serious problems of policy. Interest in the development if new roal mines also continues to be strong, not so much beause of need for increased supplies of coal as for cheaper ources. Exploration for base metals is on the increase, though its not as yet of major importance.

All these activities involve only an insignificant reportion of the area of the Forest Reserve. However, because the nature of the operations, they may have an important fect on watershed management and call for close supervision the interests of water conservation.

OREST VENTORY

Work on an inventory of the forest resources of the conservation area was continued during the season of 1952, chiefly north of the Bow

River. A total of 912 representative plots were sampled.

While the field work in connection with the forest inventory is not complete, the bulk of the survey has been finished, and it is expected that a very small field party can obtain the remaining data required during the summer of 1953. When all the information is collected, it will be a relatively simple matter to calculate the amount of timber of various types present on the area.

It should be emphasized, however, that the objective of the timber survey is not merely to obtain the data needed to estimate the extent of the forest resources. On the contrary, much effort has been put into gathering facts concerning the growth and other characteristics of the forest which will be of permanent value in the development of forest management plans. The analysis and interpretation of this data will take much longer than the mere calculation of total volumes.

HYDROLOGY

OF DATA all major streams at or near the points where they flow out of the Forest Reserve has been completed. This work was done at the expense of the Board but under the direction of the Water Resources Division of the Federal Department of Resources and Development. The Board wishes to make grateful acknowledgement of this co-operation. Henceforth these gauging stations will be incorporated in the departmental system, and will be operated and maintained as an integral part of the national chain of gauging stations.

A good start has been made in the establishment of a network of storage precipitation gauges in the Forest Reserve to supply reliable information on the amount of rain and snow falling on the area. Thirty-five such gauges were set out in the autumn of 1952 and a substantially greater

River. A total of 912 representative plots were sampled.

While the field work in connection with the forest inventory is not complete, the bulk of the survey has been finished, and it is expected that a very small field party can obtain the remaining data required during the summer of 1953. When all the information is collected, it will be a relatively simple matter to calculate the amount of timber of various types present on the area.

It should be emphasized, however, that the objective of the timber survey is not merely to obtain the data needed to estimate the extent of the forest resources. On the contrary, much effort has been put into gathering facts concerning the growth and other characteristics of the forest which will be of permanent value in the development of forest management plans. The analysis and interpretation of this data will take much longer than the mere calculation of total volumes.

HYDROLOGY

COLLECTION OF DATA

The establishment of gauging stations on all major streams at or near the points

has been completed. This work was done at the expense of the Board but under the direction of the Water Resources. Division of the Federal Department of Resources and Development. The Board wishes to make grateful acknowledgement of this co-operation. Henceforth these gauging stations will be incorporated in the departmental system, and will be operated and maintained as an integral part of the national chain of gauging stations.

A good start has been made in the establishment of a network of storage precipitation gauges in the Forest Reserve to supply reliable information on the amount of rain and snow falling on the area. Thirty-five such gauges were set out in the autumn of 1952 and a substantially greater

number will be erected next year. Regular monthly readings are obtained from those which are readily accessible, but others located in remote places and at high elevations can only be read a few times during the year. The readings from these gauges will be of great value when records for a number of years have been accumulated to form a basis of comparison. Meanwhile the readings will show immediately the relative amounts of precipitation at various elevations.

A survey of soils in the southern portion of the Crowsnest Forest has been made and this completes a reconnaissance of soil types throughout all that portion of the Forest Reserve south of the Bow River. The emphasis in this survey has been on soil-water relationships with the ultimate objective of learning more about the management of timber and rangeland on different soil types in order to promote good watershed conditions.

MISCELLANEOUS

As in previous years, several members of the field staff of the Forest Reserve attended a ten-week training school operated by the Alberta Forest Service. Members of the Forest Reserve supervisory staff and of the Board staff assisted in giving instruction at this school.

In co-operation with the Technical Division of the Alberta Department of Lands and Forests, this Board undertook to publish six forest-cover map sheets prepared by the Federal Forestry Branch. These maps cover a substantial part of the Forest Reserve and are of use in administration, to timber operators and to the general public. The Board's gratitude is due to those agencies whose cooperation made publication possible.

A small tree-planting project was carried out in the spring of 1952 by a group of Boy Scouts. This was a continuation of plantations begun in previous years.

aumber will be erected here year. Regular monthly readings are obtained from those which are readily accessible, but others located in remove places and at any accessible, but pally he read a tew inner dates are the reading the read a tew inner dates are gauges, will be of great value when records for a pumparison. Meanwhile the readings will show immediate the relative amounts of precipies ion at various staryings.

A survey of soils in the southern portion of the recommission of the recommission of the recommission of the southern south of the Bow River. The emphasis in this survey as a bern on soil water relamonables with the altimate objective of Rearring more south the management of Rember and rangeland on different soil types in order to promote good water shed conditions.

MISCELLLANGOUS

As in previous years, several members of the field staff of the Forest Reserve amended a ten-week training school operated by the Alberts Forest Service. Members of the Forest Reserve supervisory staff and of the Board staff assisted in giving instruction at this school.

in co-operation with the Technical Division of the Alberta Department of Lanns and Forests, this Board anderbook to publish six forest cover map shorts prepared by the Fotestry Branch. These maps cover a substantial part of the Fotest Reserve and are of use in administration, to implee operators and to the general public. The Board, spratitude is due to those agenties whose covers the made publication passable.

A small tree planting project was carried out a the spring of 1952 by a group of Hor Scours. This was a catimustion of plantations begun in previous years.

The Board was happy to have as visitors to the conservation area technicians from other parts of Canada and more distant parts of the world, interested in learning of our problems and the methods used to meet them. Such intercourse has almost invariably proved mutually advantageous.

ADMINISTRATION

No changes occurred among the senior members of the Alberta Forest Service on the East Slope Reserve and no changes were made in the basic establishment of the field staff. There have been about the usual number of transfers and resignations. The staff of the Forestry Division of the Board also continues at the same strength, although there have been three resignations and replacements during the year.

E. S. Fellows,
Chief Forester.

The Conservation area technicians from other parts of the conservation area technicians from other parts of Canada and more distant parts of the world, interested in learning of our problems and the methods used to meet them. Such intercourse is a simost invariably proved mutually advantageous.

ADMINISTRATION

No changes occurred among the senior members of the Alberta Forest Service on the East Slope Reserve and no changes were made in the basic establishment of the field staff. There have been about the usual number of transfers and resignations. The staff of the Forestry Division of the Board also continues at the same strength, although there have been three resignations and replacements during the year.

E. S. Fellows, Chief Forester

REPORT OF THE SECRETARY

During the year under review the same basic administrative pattern was followed by the Board as in former years. As required under the provisions of the Eastern Rocky Mountain Forest Conservation Act, all necessary steps were taken to keep the Minister of Resources and Development in Ottawa and the Minister of Lands and Forests in Edmonton informed of developments.

MINUTES OF MEETINGS

Minutes of the Board meetings, eight in number, held during the year in Calgary and Ottawa, were kept and

transmitted to the respective Ministers.

cial legislation was enacted, amending certain aspects of the Eastern Rocky Mountain Forest Conservation Act. Under the terms of the amendment the capital expenditure period is extended from six to seven years to 31st March 1955. All maintenance expenditure incurred by the Alberta Forest Service and the Board becomes the responsibility of the Province of Alberta with effect from 1st April 1952 and the method of appointing Board members is changed, effective on 1st April 1955, to enable two Provincially appointed members and one Federally appointed member to function.

FINANCES The financial procedure adopted by the Board followed practically the same pattern as in former years with three main accounts continuing to be operated, all subject to audit as required by the Act.

Total capital expenditures for the year amounted to \$1,034,015.92, bringing the cumulative total

REPORT OF THE SECRETARY

definistrative pattern was followed by the Board as in side in the same, basic former years. As required under the provisions of the Eastern Rocky Mountain Forest Conservation Act, all necessary steps were taken to keep the Minister of Resources and Development in Ottawa and the Minister of of Lands and Forests in Edmonton informed of developments.

MINUTES OF MEETINGS

in number, held during the year in Calgary and Ottawa, were kept and

transmitted to the respective Ministers.

LEGISLATION During the year Federal and Provincial legislation was enacted, amending

certain aspects of the Eastern Rocky Mountain Forest
Conservation Act. Under the terms of the amendment the
capital expenditure period is extended from six to seven
years to 31st March 1955. All maintenance expenditure
incurred by the Alberta Forest Service and the Board becomes the responsibility of the Province of Alberta with
effect from 1st April 1952 and the method of appointing
Board members is changed, effective on 1st April 1955,
to enable two Provincially appointed members and one
Federally appointed member to function.

FINANCES

Board followed practically the same in former years with three main accounts con-

pattern as in former years with three main accounts continuing to be operated, all subject to audit as required by the Act.

Total capital expenditures for the year amounted to \$1,034,015.92, bringing the cumulative total

for expenditure during the five years of the Board's operation to \$4,883,284.73. With \$6,300,000.00 allocated for disbursement on capital account during the seven-year period 1948-1955, it can be seen that the sum of \$1,416,715.27 remains to be expended in the final two years.

Maintenance disbursements during the year amounted to \$58,852.49 expended by the Board and \$240,715.73 covering the Maintenance Operating account for the expenses of the Alberta Forest Service acting as the Board's agent in its area of jurisdiction. This reflected a combined total of \$299,568.22, assumed wholly by the Province of Alberta.

The accompanying statement of assets and liabilities, together with the accompanying schedules, reflects the financial operation of the Board and its financial position as at 31st March 1953.

REVENUE During the year revenue from surface rights derived by the Alberta Department of Lands and Forests in the East Slope area amounted to \$467,939.53, this sum being fully adequate to meet the maintenance expenditure and in excess of the total maintenance reported above.

GRAMME AND
ESTIMATES

Expenditures during the year were based on estimates drawn up and approved in November 1951, and conformed closely to the pattern set. Seasonal weather con-

ditions were generally good and allowed progress to be made at a rate that compared well with the previous annual average. The extension of the capital expenditure period by one year should allow some additional time for the close scrutiny of the final phases of certain projects and the general rounding out of the whole programme.

As required under the Act, estimates were drawn up and submitted in November 1952 outlining the commitments in the capital and maintenance fields for the fiscal year 1953-54. Estimates on capital account totalled

for expenditure editing the live years of the Board's operation to \$ 4,883,384 73 with \$ 6,300,000.00 allocated for disbursement on tupiful account during the severyear period 1946-1955, it can be seen that the sum of

Maintenance dispursements during the year amounted to \$58,852.49 expended by the Board and \$240,715.71 covering the Maintenance Operating account for the expenses of the Alberta Forest Service acting as the Board's agent in its area of jurisdiction. This reflected a combined total of \$299,568.25, assumed wholly by the Province of Alberta

The accompanying statement of assets and itabilities, together with the accompanying schedules, relieves the linancial operation of the Board and its linancial position as at 31st March 1953.

REVENUE Daring the year revenue from surface rights derived by the Alberta Department of Lands and Forests in the East Grope area amounted to \$467,939,53; this sum being fully adequate to meet the maintenance expenditive and in excess of the total maintenance reparted above.

CURRENT PRO- Expenditures during the year were bases GRAMME AND on certinates drawn up and approved in STIMATES November 1951, and conformed closely

difficus were generally good and allowed progress to be made at a rate that compared well with the previous annual average. The extension of the capital expenditure period by one year should allow some additional time for the close scrattiny of the final phases of certain projects and the general rounding out of the whole programme.

As required ander the Act, estimates were drawn up and submitted in November 1952 outlining the commitments in the capital and maintenance fields for the fiscal year 1953-54. Estimates on capital account totalled

\$1,096,500.00 and those for maintenance account totalled \$346,000.00, made up of \$277,000.00 for the Alberta Forest Service Maintenance Operating account and \$69,000.00 for the Board's own Maintenance Administration account.

Constantly rising costs have necessitated close supervision of commitments, with a high standard of efficiency of field operations being maintained.

WORKMEN'S The Board continued to maintain its
COMPENSATION deposit of \$10,000.00 with the Alberta
Workmen's Compensation Board. Claims
during the year on behalf of the Board's own staff amounted
to \$453.93. An additional amount totalling \$2,450.16,
based on a percentage of payroll, was added to the contingency
reserve for heavy claims in the future, bringing the total
reserve to \$9,231.16.

ROUTINE ADMINISTRA-TION The Board continued to operate its own bank account with a chartered bank in Calgary, with arrangements working well. To facilitate auditing, this account was

divided into two separate ones, one for capital expenditure and the other for maintenance expenditure, with effect from 1st April 1953.

Financing of the Board's own maintenance expenditures was changed slightly during the year. A system was introduced by which the Province of Alberta furnishes the Board with an accountable advance for \$10,000.00, which serves to meet the Board's needs from month to month. Reimbursement is made on submission to the Province of the certified total outlay for each month by the Board.

The regular audited quarterly claims for capital expenditure by the Province for reimbursement were cleared through the Board's office and, after approval by the Board,

\$1,096,500.00 and those for maintenance account totalled \$346,000.00, made up of \$277,000.00 for the Alberta Forest Service Maintenance Operating account and \$69,000.00 for the Board's own Maintenance Administration account.

Constantly rising costs have necessitated close supervision of commitments, with a high standard of efficiency of field operations being maintained.

WORKMEN'S The Board continued to maintain its COMPENSATION deposit of \$10,000.00 with the Alberta

Workmen's Compensation Board. Claims during the year on behalf of the Board's own staff amounted to \$453.93. An additional amount totalling \$2,450.16, based on a percentage of payroll, was added to the contingency reserve for heavy claims in the future, bringing the total reserve to \$9,231.16.

ROUTINE ADMINISTRA-TION

The Board continued to operate its own bank account with a chartered bank in Calgary, with arrangements working well. To facilitate auditing, this account was

divided into two separate ones, one for capital expenditure and the other for maintenance expenditure, with effect from let April 1953.

Financing of the Board's own maintenance expenditures was changed slightly during the year. A system was introduced by which the Province of Alberta furnishes the Board with an accountable advance for \$10,000.00, which serves to meet the Board's needs from month to month. Reimburgement is made on submission to the Province of the Certified total outlay for each month by the Board.

The regular audited quarterly claims for capital expenditure by the Province for reimbursement were cleared through the Board's office and, after approval by the Board,

were forwarded to the Department of Finance in Ottawa for payment which was effected promptly.

Loyalty and hard work on the part of the office staff is gratefully acknowledged.

J. D. Middlemass, Secretary. were forwarded to the Department of Finance in Ottawa for payment which was effected promptly.

Loyalty and hard work on the part of the office staff is gratefully acknowledged.

J. D. Middlemass, Secretary,

THE DISTRIBUTE WITH THE PROPERTY OF THE PROPER

Maria and American State of the Committees

THE RESERVE OF THE PARTY OF THE

Community of Commiss Arrageous provided under authority of Mariak Commission (Cafford thought), for commission

Loom (Cobstonersto, per Schedule I

rodina of Albanus Rimanos fig e qui satronamicano Lazor Ropolitatica, per Schoole II

onimentary limposite (contra)

Cicine Jun and passed a comparable of the compar

from the Provident, to be discharged on termination of the approximative has

Salama de de Side Geren 1999, per Sebenio Est

355,855,4

OBSECAL CA

The singular of the Fintern Rockies Forest Conservation Need for the front year substitute of 1253 term been exected order of direction to the retained order of direction to the retained order of properties and all the information and explanations and at the acceptance of the accep

A Postagon, and the Den only of Grands.

A.D. Siddismuns, Secretary,

Drawed and the Minded on howevery &

a tilbuttett Staatil

EASTERN ROCKIES FOREST CONSERVATION BOARD

(Established under the Eastern Rocky Mountain Forest Conservation Act, and Operating under Agreement between the Dominion and the Province of Alberta)

Statement of Assets and Liabilities

as at 31st March 1953

Assets

Cash on Hand and in Bank		\$ 36,346
Inventories, at cost: Loose tools and small equipment Construction materials and supplies	\$ 17,005 57,393	
		74,398
Contractors: Deposits		18,000
Deposits and Prepaid Expenses: Deposits Prepaid insurance, etc.	18,008 1,402	19,410
Fixed Assets: Capital improvements and works, per Schedule I Movable equipment, etc., per Schedule IV \$ 548,601 Less: Provision for de-	4,396,711	
preciation 306,786	241,815	 ,638,526 ,786,680

Note: *The Schedule to the Act, Section 20, provides that, upon termination of the agreement between the Governments of Canada and of the Province, which is for a period of not less than twenty-five years ended 1973, (a) all improvements or works resulting from the carrying out of the programmes of the Board shall belong to the Province, (b) all other property acquired by the Board shall belong to the Dominion.

Certified Correct

J.D. Middlemass, Secretary.

Approved on behalf of the Board

Howard Kennedy, Chairman,

Liabilities and Proprietary Equity

Liabilities

Government of Canada: Advances provided under authority of - Section 8(1) of the Act, for capital		
expenditures Less: Disbursements, per Schedule I	\$ 1,058,545 1,034,016	125.723
Total - New Commission400		\$ 24,529
Province of Alberta: Advances for annual maintenance expenses Less: Expenditures, per Schedule II	302,153 299,568	96,292 29,388
Contractors Deposits (contra)		2,585
Reserved for: Claims for workmen's compensation Employees' retirement fund	9,231 8,009	17,240
Deferred Liability, for equipment taken over from the Province, to be discharged on termination of the agreement		25,480
Proprietary Equity		1,121
Balance as at 31st March 1953, per Schedule III		4,698,846
		4,786,680

The accounts of the Eastern Rockies Forest Conservation Board for the fiscal year ended 31st March 1953 have been examined under my direction to the extent considered appropriate and all the information and explanations which have been required have been received. In my opinion, the above Statement of Assets and Liabilities is properly drawn up so as to exhibit a true and correct view of the Board's affairs as at 31st March 1953, according to the best of my information and the explanations given to me and as shown by the books of the Board.

J. Hopkinson,
Assistant Auditor General of Canada.

maye been required have been received, in my opinion, the above Statement of house formor her parts a didnike of the owner march of region at as tallifedd the effects Statement of Capital Disbursements, from inception to 31st March 1953, from funds provided by the Government of Canada (as authorized under Section 8(1) of the Act), for the location and construction of forest improvements, the making of a forest inventory, reforestation, and such other works and services as the Board may consider necessary in that area of the East Slope of the Rocky Mountains forming part of the watershed of the Saskatchewan River, as more definitely described in the Appendix to the Act. The total expenditure is not to exceed \$6,300,000 during the seven years ended 31st March 1955

	1952 - 53	To date
Improvements and Works:		
New Construction -		
Roads and trails	909,965	\$ 4,042,606
Buildings	42,084	124,725
Total - New Construction	952,049	4,167,331
Other Expenses -		
Range and watershed survey	33,879	94,191
Radio network	11,792	49,148
Camping grounds	9,809	31,593
	2,327	18,091
Stream gauging	634	7,125
Visibility mapping	0)4	
Water resources survey		6,685
Boundary survey	2 5/2	5,078
Workmen's compensation, provision for	1,561	4,189
Film production	7 207	2,465
Stock gates and entrance gates	1,301	2,166
Hay meadows	645	1,701
Miscellaneous improvements	596	1,587
Radio survey	16,70	1,465
Forest signs	691	1,131
Basic survey and mapping	1,063	1,063
Telephone lines	-	1,049
Provision for retirement fund	111	667
Refund of interest on retirement fund	14 cr.	14 cr.
Total - Improvements and Works	1,016,444	4,396,711
Movable Equipment:		
Tractors and heavy equipment	20,352	165,931
Cars and trucks	5,045 cr.	81,607
Radio equipment	17,773	64,755
Forestry equipment	3,321	56,769
Camp and miscellaneous equipment	2,908	47,592
Office furniture and equipment		2,826
Livestock	-	80
	39,309	419,560
Additions to (reductions in) Stores and		
other Inventories:		
Construction materials and supplies	23,547 cr.	57,393
Loose tools and small equipment	1,528	9,339
	22,019 cr.	66,732
Property of Workman is Communication	282	282
Prepayment of Workmen's Compensation		
Total Disbursements	1,034,016	4,883,285

behind a first construction of Canada (as antiscostion to 31at Hard 1983, from tonday provided by the Government of Canada (as antiscrites antiscrites antiscrites of the set), for the low set on and construction of forest improvements, the method of a forest inventory, restantion, and such other works and services as the Board may consider macassang in set area of the East Singe of the Hocky Mountains forming part of the extensive of the catalogue, as not a definitely described in the Appendix to the Act. The total extensive forming the match loss extensive is not to exceed \$6.500,000 dowing the seven reserved that Merch 1995

Staff-SI		
		New Construction -
	930,589	
188,931,1	Const.	
		Range and watershed survey
	21,992	
18,091		
7,325		
6,078		
201.0		
881,5		
		emphase tall
	1,063	
		Provision for retirement fund
		heart themeritar no tetraint to bourse
	- NO AL	
	20,352	Cars and trucks
567,33		
		Total Disbursements

Statement of Expenditures for Forest Maintenance. Protection and Management for the year ended 31st March 1953

		Expend	led by
	Total	The Board	The Province
Maintenance Expenses:			
Salaries	\$ 208,167	\$ 38,851	\$ 169,316
Automotive expense	17,979	2,566	15,413
Repairs and replacements (other than			
motor vehicles)	14,026	471	13,555
Wages	11,794		11,794
Travel	7,513	1,050	6,463
Rental	3,676	3,600	76
Printing, stationery and office supplies	3,474	2,804	670
Workmen's compensation	3,078	1,068	2,010
Heat, light and power	3,104	02.5	3,104
Miscellaneous supplies and expenses	1,547	215	1,332
Telegrams and telephones	1,393	621	772
Provision for retirement fund	1,215	1,215	· ~
Postage and excise	873	201	672
Uniforms for forest rangers	739	27	739
Freight express and cartage	517 107		490 107
Camp supplies	126 cr.	. 126 cr.	
Interest earned	1,082	187	895
Other expenses		101	- 077
	280,158	52,750	227,408
Fixed Assets - Movable Equipment:			
Cars and trucks	16,720	4,761	11,959
Forestry equipment	719	713	6
Camp and miscellaneous equipment	174	163	11
Office furniture and equipment	95	79	16
Engineering equipment	23	23	
	17,731	5,739	11,992
Other Expenditures:			
Increase in -			
Prepaid expenses	1,094	44	1,050
Inventory of loose tools and small	_,_,		
equipment	585	320	265
	1,679	364	1,315
Cotal Expenditures	299,568	58,853	2/0 775
Codi pybendicules	277,000	70,077	240,715

Contributed by the Province of Alberta in accordance with Section 2(a)(ii) of the Memorandum of Agreement, dated 17th June 1953, between the Government of Canada and the Government of Alberta as set forth in the Schedule to Chapter 41 of the Statutes of 1952, amending the Eastern Rocky Mountain Forest Conservation Act.

Note: By Section 1(5) of the Schedule to the Act, the remuneration and expenses of the Members of the Board are paid by the Government by whom each is respectively appointed; such expenses are, therefore, not included above.

Statement of Expenditure for Forest Maintenance, Erstanding of Santalanding Statement of the Maintenance of the Santalanding Salt Santalanding Sant

	ing Force		
			-tamanca Expenses:
		\$ 208,167	
15,413		37,979	
			neily monday adminestiger has erieg
23,555		34,026	insloider rotor
		7,513	
76		3,676	
003			
1,332			sacallameous supplies and expenses
			secondated bas emergele
416			
21.9			nalowe has againe
067			
	to ass		bedrae derech
	081,58		
		material and a second second	
		err	
11			
36			
Marin P.		Secretarization and the secretarian secret	
11,992	5,739	17,731	
			ni osestin
1,090	27	1,084	Propeld expanses
			Ileme bus aloed escoil to ytoduseni
265			
Miles and the same			
240,715			
THE PARTY OF THE P		Marian San San San	

Contributed by the Province of Alterta in adocadence with Section 2(a)(1) of the document of Cameda and Sectional Landrague of Cameda and Sectional to Chapter Al of the Statutes the Government of Alberta as set forth in the Southertains and acts.

is the Section 1(5) of the Schedule to the Act, the resumeration and expenses in the Members of the Search are paid by the Severages by whom such the Search are the Searches, not included above.

Statement of Proprietary Equity for the year ended 31st March 1953

Balance as at 1st April 1952		\$ 3,733,957
Increments on Capital Accounts Disbursements, per Schedule I Add:	\$ 1,034,016	
Revenues from sales and trade-in allowances on purchases \$ 13,838		
Write-offs during the year in respect of items retired, destroyed or lost 10,342	3,496	
	1	1,037,512
Increments on Maintenance Accounts Expenditures, per Schedule II - Movable equipment Other expenditures	17,731 1,679 19,410	
Add: Trade-in allowances on purchases 1,671 Less:		
Write-offs during the year in respect of items retired,		
destroyed or lost 1,554	117	
Less: Reduction in prepaid expenses	1,303	
		18,224
Provision for depreciation of fixed assets, for the	year	90,847
Balance as at 31st March 1953, per Statement of Assets and Liabilities		4,698,846

prince read that bear age ed to

Fixed Assets - Movable Equipment as at 31st March 1953

	Book Value -	Book Value - cost, as at 31st March 1953	arch 1953	Provision for Depreciation 31st March 19	Provision for Depreciation to 31st March 1953	Depreciated Value
	For maintenance purposes	For capital purposes	Total	Rate %	Amount	
Movable Equipment -						
Tractors and heavy equipment	\$ 24,3	\$ 165,658	\$ 165,901	20	\$ 128,413	\$ 37,488
Cars and trucks	82,093	70,149	152,242	20	101,658	50,584
Forestry equipment	11,211	56,721	67,932	10	25,652	75,280
*Equipment taken over from the Province		22,790	22,790		•	22,790
Camp and miscellaneous equipment	9,031	46,568	55,599	01	16,918	38,681
Radio equipment		64,519	64,519	20	25,328	39,191
Office furniture and equipment	7,647	2,827	10,474	10	4,434	070°9
Engineering equipment	8,477		147,8	10	7,066	4,411
Livestock		88	8	10	77	96
Columbia Ice Fields Gauge House	587	.1	587	10	293	294
Totals	119,289	429,312	548,601		306,786	241,815

CIRC F	FB 2	0'76							
omo .			4						
			CLUEVA.						
EFI	2 5	3 RE	TURN						
		le n	crum	4					
			ETUR						
1	EC.	I O D	ETUR	-					
	Sec. 10.	18 17	FIUN	N					
									2
									NEW ASKOU ISS
				-					1 10
									1
							-		-
-									
				-					100
									10
									Motor 782
		-		-					
									Jack.
		-		-		-			0.0
									Arlee - cost
							-		- 0
									0
1									
					11,23				

18,28

Notice and a second

e Fleice Cenge Ro

necallaceder for que Severings ethe bes excitent entit distinguished administration of

- Jasephan Burthern -

The state of the same same

SD 414 C2 E116 1952/1953 EASTERN ROCKIES FOREST CONSERVATION BOARD. ANNUAL REPORT OF THE EASTERN SERIAL

000038197588

50 44 CRENG 1952/53

SCIENCE 2299448 CAMERON LIBRARY